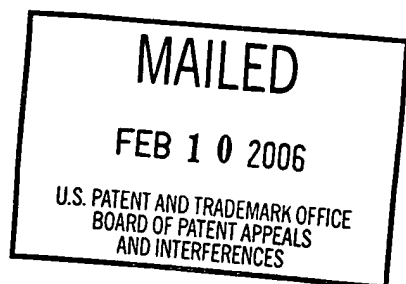


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

**UNITED STATES PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**



Ex parte HOWARD B. SOSIN

Appeal No. 2005-2680  
Application No. 09/248,515

HEARD: JANUARY 24, 2005

Before FRANKFORT, CRAWFORD and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 50-54 and 59-69, which are all of the claims pending in this application.

**BACKGROUND**

The appellant's invention relates to an iron-type golf club having a non-zero lean angle (the angle between a projection of the centerline of the shaft onto a vertical surface, the plane being along an intended line of play, and a vertical line in such vertical plane) when the club is oriented at its design loft (i.e., the angle, relative to the

vertical, at which the club face should strike the ball). According to appellant, all conventional iron-type clubs have a zero lean angle when the club is oriented at its design loft. Accordingly, when a golfer, as many golfers do, strikes the ball with the shaft in a non-vertical orientation, the effective loft angle differs from the design loft angle. Thus, in accordance with appellant's invention, a club can be customized for the golfer to provide the design loft taking into account the golfer's particular swing. A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

### ***The Applied Prior Art***

The examiner relied upon the following prior art references of record in rejecting the appealed claims:

Thompson	3,961,796	Jun. 8, 1976
Scheie et al. (Scheie)	5,120,062	Jun. 9, 1992
Hirose	5,564,991	Oct. 15, 1996
Adams et al. (Adams)	5,971,866	Oct. 26, 1999
Ahn et al. (Ahn)	6,015,354	Jan. 18, 2000

### ***The Rejections***

The following rejections are before us for review.

Claims 51, 53, 54 and 59-69 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Thompson.

Claims 50 and 52 stand rejected under 35 U.S.C. § 103 as being unpatentable over Thompson in view of Scheie.

Claims 50-54, 59, 60, 67 and 68 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ahn in view of Hirose and Scheie.

Claims 64 and 65 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ahn in view of Hirose, Scheie and Adams.

Claims 61-63, 66, 67 and 69 stand rejected under 35 U.S.C. § 103 as being unpatentable over Adams in view of Hirose.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (mailed August 24, 2004) and supplemental answer (mailed January 25, 2005) for the examiner's complete reasoning in support of the rejections and to the brief (filed July 6, 2004), reply brief (filed October 28, 2004) and response to examiner's supplemental answer (filed March 14, 2005) for the appellant's arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, to the declarations of John Hampford and Rodney Loesch relied on by appellant in the brief, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Claims 51, 53, 54 and 59-69 stand rejected as being anticipated by Thompson. The appellant has argued all of these claims together as a group. Therefore, in accordance with 37 CFR § 41.37(c)(1)(vii), we shall decide the appeal of this rejection

on the basis of claim 60, with claims 51, 53, 54, 59 and 61-69 standing or falling therewith.

Claim 60 recites an iron-type golf club comprising a head having a face, a sole and a single design loft, a single straight hosel and a single straight shaft connected to the head via the hosel such that if the head were positioned on a flat surface so that its face achieves the design loft with respect to the perpendicular, the shaft would not be perpendicular to the flat surface. In other words, the club has a non-zero lean angle with the impact face of the head positioned at its design loft. According to the examiner, in Figure 2, Thompson discloses a non-zero lean angle of the shaft 30 when the head 10 is positioned on a flat surface 34 so that its front face 14 is oriented at its design loft with respect to the perpendicular. Indeed, Figure 2 clearly depicts the shaft 30 oriented at a non-zero angle relative to the vertical (the perpendicular to surface 34) with the head of the club positioned with its keel resting flatly on horizontal surface 34. As explained by Thompson in column 2, lines 11-16,

[f]ront face 14 has an inclination  $\alpha$  from a vertical plane which may vary as required for the intended use of the iron; in this regard, the illustrated iron is intended to represent an iron known as a wedge for which  $\alpha$  is between about 30 and 40 degrees from vertical, in FIG. 4.

Appellant relies on the Hampford and Loesch declarations to establish that all golf clubs made today are designed and constructed so that, at the time of manufacture, they have a zero lean angle. Mr. Loesch states in the Loesch declaration that he has never seen an iron or wedge with a non-zero lean angle (paragraph 4). On

that basis and because the shaft 30 is only represented as a dashed line, the Loesch declaration concludes that Thompson intended no lean angle. According to the declarant, given that the concept of a lean angle is so unusual, he would have expected "[a patent having] a picture intended to illustrate a lean angle to discuss it extensively" (Loesch declaration, paragraph 5).

We have carefully considered the Hampford and Loesch declarations but find them ineffective to refute the clear illustration and teachings of Thompson. Specifically, at best, the Hampford and Loesch declarations establish that neither declarant was aware of a club being designed and manufactured having a shaft with a non-zero lean angle before the invention of appellant. Even assuming this to be true, the fact that such a club was never manufactured or commercialized does not mean that such a club was not known in the art at the time of appellant's invention. Thompson (Figure 2) depicts a club having a shaft clearly disposed at a non-zero angle relative to the vertical, with the front face 14 of the head 10 oriented at an angle  $\alpha$  relative to the vertical (Figure 4), the angle  $\alpha$  being described in the text in column 2, lines 11-16, quoted above, in terms strongly indicative of a design loft (i.e., inclination of the face from the vertical plane in the intended use of the iron).

Appellant argues on page 2 of the reply brief that Thompson's teaching of an angle  $\alpha$  of between 30 and 40 degrees and depiction of an angle  $\alpha$  of about 35 degrees "to represent 'an iron known as a wedge'" would have led one of ordinary skill in the art to conclude that angle  $\alpha$  does not represent a design loft, because design

lofts of wedges range from between 45 to 64 degrees, not 30 to 40 degrees. Instead, according to appellant, the wedge must be shown tipped forward from its design loft orientation. This argument, of course, presumes that Thompson has not designed a wedge, perhaps an improved wedge, having a design loft outside of the range of wedges recited in the Cleveland Golf "Wedge Selection Guide" appended to the reply brief. In this regard, we note that Hirose discloses an inventive sand wedge having a loft angle of 70 to 90 degrees, outside the ranges discussed in the Cleveland Golf "Wedge Selection Guide," to enable a player to loft a ball almost directly overhead.

Moreover, the examiner's remarks in the supplemental answer that, even if Figure 2 of Thompson discloses a club tipped forward from the loft state intended by the manufacturer, it is nonetheless a loft angle, are well taken. Without the recitation in claim 60 of further structure of the club, such as details of the sole or bounce characteristics, in relation to the design loft, the difference between design loft and loft in orientations other than that intended by the manufacturer goes to intended use rather than structure. It is well settled that the recitation of an intended use for an old product does not make a claim to that old product patentable.<sup>1</sup> In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

In light of the above, having weighed all of the evidence before us, we conclude that the subject matter of claim 60 is anticipated by Thompson. We therefore sustain

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<sup>1</sup> Stated differently, a single club may at once be one golfer's club with a 27 degree loft, 3 degree lean angle and a first bounce characteristic and another golfer's club with a 30 degree loft, zero lean angle and a second bounce characteristic, especially in light of the differences in golfers' swings discussed on page 2 of appellant's specification.

the rejection of claim 60, as well as claims 51, 53, 54, 59 and 61-69 that stand or fall therewith, as being anticipated by Thompson.

We shall also sustain the rejection of claims 50 and 52 as being unpatentable over Thompson in view of Scheie. The above-discussed arguments of appellant with respect to Thompson are no more persuasive when applied to claims 50 and 52 than to claim 60. Claim 50 further recites that the head and hosel have been cast or forged at the time of manufacture to achieve the non-zero lean angle. The examiner relies on Scheie for a teaching that casting or forging of the head and hosel of a golf club was well known at the time of appellant's invention and appellant admits that such was known in the art, submitting that reference to Scheie for this teaching was not necessary (brief, page 4).

Claims 50-54, 59, 60, 67 and 68 stand rejected as being unpatentable over Ahn in view of Hirose and Scheie. All of these claims are grouped together under a single heading, with none of the claims argued separately under a subheading. Appellant does, however, present an argument directed specifically to claim 53 on page 9 of the brief. Accordingly, notwithstanding that appellant has not complied fully with 37 CFR § 41.37(c)(1)(vii) by presenting a separate subheading for claim 53, we treat claim 53 separately from the remainder of the claims in the group. As for the remainder of the claims, in accordance with 37 CFR § 41.37(c)(1)(vii), we have selected claim 60 as the representative claim on which to decide the appeal of this rejection, with claims 50-52, 54, 59, 67 and 68 standing or falling therewith.

The examiner points to Ahn's illustration of an iron in Figure 5, wherein the front face of the head is depicted as inclined relative to the vertical (the perpendicular to the horizontal sole portion of the head) and the hosel 8 and shaft 1 are depicted as inclined relative to the vertical so as to give the shaft a non-zero lean. The examiner finds that Ahn lacks a single straight shaft<sup>2</sup> and the head and hosel being formed by forging or casting<sup>3</sup>. The examiner notes that Hirose discloses an iron club having a single straight shaft (Figures 13, 14, column 1, lines 10-25) and determines that it would have been obvious in view of Hirose to modify the club of Ahn to have a single straight shaft in order to increase the velocity of the head at impact. The examiner relies on Scheie as evidence that the forging or casting of heads and hosels was well known in the art at the time of appellant's invention and appellant does not dispute this.

Appellant's arguments with respect to Ahn are similar to those raised with respect to Thompson, namely, that, to the extent that Figure 5 of Ahn could be construed to depict a club with a lean angle, it is merely because it is an inaccurate rendering of a standard club (i.e., one with a zero lean). The basis of this argument is that there is no discussion in Ahn of the design loft or bounce of golf clubs or the concepts of effective loft and lean angle and no discussion of the desirability of a lean angle. In essence, according to appellant, the concept of a non-zero lean angle is such

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<sup>2</sup> The basis for this finding presumably is that Ahn illustrates only a short extent of the bottom portion of the shaft.

<sup>3</sup> While a forged or cast head and hosel is recited in claim 50 of this grouping, this limitation does not appear in any of the other claims in this grouping, including representative claim 60.



a radical departure from the conventional that Ahn would have discussed it if the non-zero lean were intentional (see brief, page 8).

Our discussion of these arguments above with respect to Thompson, as well as the Hampford and Loesch declarations relied upon by appellant, applies substantially equally to Ahn. Specifically, while the declarations of Hampford and Loesch may establish that the declarants were not aware of any golf clubs being designed and manufactured at the time of appellant's invention with a non-zero lean, they are simply not sufficient to establish that clubs with non-zero lean angles were not known in the art at the time of appellant's invention, as many inventions are never commercialized.

Appellant also argues that, since the single straight shaft of Hirose is connected to the head of the club with no lean angle, a person of ordinary skill in the art wishing to manufacture a golf club based on the teachings of Ahn and Hirose "would be much more likely to select the standard, no-lean-angle connection of Hirose rather than the 15 degree 'lean angle' of Ahn" (brief, page 9). This argument is not well founded and not supported by evidence<sup>4</sup>. Ahn, at worst, lacks sufficient detail of the entirety of the shaft to enable one to determine with certainty whether or not it is straight. Given the limited universe of options (i.e., either straight or not straight), the lack of any indication by Ahn that the shaft is anything but straight, and the showing by Hirose that straight shafts on irons were well known in the art at the time of appellant's invention, it would

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<sup>4</sup> Attorney's arguments in a brief cannot take the place of evidence. In re Pearson, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974).

have been obvious to one of ordinary skill in the art to provide a single straight shaft 1 on Ahn's club, extending from the hosel 8 as shown in Figure 5 of Ahn, at an angle from vertical.

Appellant's argument on pages 8 and 9 of the brief that the angle of the shaft in Ahn's Figure 5 relative to the vertical is 15 degrees, and 12 or more degrees in others of the Ahn drawings, which falls outside the scope of the claimed lean angle, for example, in claims 53 or 66, is manifestly not commensurate with the scope of representative claim 60, which simply recites that the shaft is not perpendicular to the flat surface.<sup>5</sup>

For the foregoing reasons, having weighed all of the evidence, including the applied references and the declarations relied upon by appellant, we find no error in the examiner's determination that the subject matter of claim 60 would have been obvious to one of ordinary skill in the art. Accordingly, we sustain the rejection of claim 60, as well as claims 50-52, 54, 59, 67 and 68 which stand or fall therewith, as being unpatentable over Ahn in view of Hirose and Scheie.

Claim 53 recites that the non-zero lean angle is greater than 3 and less than 10 degrees. Appellant and the examiner have used a variety of techniques to determine the lean angle of Ahn illustrated in Figure 5 and have arrived at different values. While

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<sup>5</sup> Claims 51 and 52, which appellant has not argued separately from claim 60 with any specificity, recite that the non-zero lean angle is "greater than 3 degrees" and "greater than 3 and less than 15 degrees," respectively. The remainder of the claims in the group, claims 50, 54, 59, 67 and 68, like claim 60, simply recite a non-zero lean angle. Even assuming appellant's measurements and calculations of the angles in Ahn are correct, they appear to fall within these recited ranges.

the illustration in Ahn's Figure 5 unequivocally is of a hosel and shaft inclined relative to the vertical, a determination as to whether the illustrated lean is within the claimed range of greater than 3 and less than 10 degrees is much more speculative.

Accordingly, we shall not sustain the rejection of claim 53 as being unpatentable over Ahn in view of Hirose and Scheie.

As to claims 64 and 65, which stand rejected as being unpatentable over Ahn in view of Hirose, Scheie and Adams, appellant simply argues that Adams does not remedy the asserted deficiency in the combination of Ahn in view of Hirose and Scheie discussed above regarding the rejection of claims 50-52, 54, 59, 60, 67 and 68. As explained above, we do not find appellant's argument persuasive as to the deficiency in the combination of Ahn, Hirose and Scheie. We thus sustain the rejection of claims 64 and 65 as well.

With respect to claims 61-63, 66, 67 and 69 as being unpatentable over Adams in view of Hirose, appellant's only argument is that Adams explicitly teaches away from a single design loft (brief, page 10). As pointed out by the examiner on pages 20-21 of the answer, claims 61-63, 66, 67 and 69 do not require a single design loft. Claim 66, in fact, does not even refer to a design loft at all. While appellant apparently attempted to add this limitation to claims 61-69 in an amendment filed with the brief, this amendment was denied entry by the examiner. Consequently, the claims before us in

this appeal do not have the limitation argued by appellant to be lacking in Adams.<sup>6</sup> It follows that appellant's argument is not persuasive of any error in the examiner's rejection. The rejection is thus sustained.

### CONCLUSION

To summarize, all of the examiner's rejections have been sustained, with the exception of the rejection of claim 53 as being unpatentable over Ahn in view of Hirose and Scheie. As a rejection of each of the claims on appeal has been sustained, the examiner's decision is affirmed.

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<sup>6</sup> We have no authority to enter the amendment denied entry by the examiner and, thus, cannot consider it in reviewing the rejection of the examiner. Review of the denial of entry of an amendment after final is by petition under 37 CFR § 1.181 and is thus not an appealable issue. See In re Mindick, 371 F.2d 892, 894, 152 USPQ 566, 568 (CCPA 1967).

AFFIRMED

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